CHAPTER 6

CAPITAL FACILITIES AND UTILITIES ELEMENT

INTRODUCTION

Capital facilities and utilities are the basic services which the public sector provides to support land use developments, both as they currently exist, and as they are anticipated to develop over the course of the 20-year growth management planning horizon. The Capital Facilities and Utilities Element provides a general summary of how and when these basic services will be provided to support future growth as envisioned by the 20-Year Plan, and how they will be paid for.

The Growth Management Act (GMA) establishes many of the requirements for the Capital Facilities and Utilities Element. The GMA establishes an overall goal to "ensure that those public facilities and services necessary to support development shall be adequate to serve the development at the time the development is available for occupancy and use without decreasing current service levels below locally established minimum standards" (RCW 36.70A.020). The GMA requires that the capital facilities element include an inventory of existing publicly owned capital facilities, a forecast for the future needs for new or expanded facilities and a six year plan to indicate from what sources the identified future facilities will be financed. The GMA defines public facilities to include roadways, street lighting, sidewalks, traffic signals, domestic water systems, storm and sanitary sewer systems, parks and recreational facilities, and schools. Public services are defined to include fire protection, law enforcement, public health, education, recreation, environmental protection, and other government services. The Capital Facilities and Utilities Element is intended to provide a general assessment of major public services which impact land use issues, rather than a detailed analysis of every service provided by government.

The Capital Facilities and Utilities Element must be consistent with the other elements of the 20-Year Plan, particularly the Land Use Element. Future development should be encouraged to occur in generally more compact patterns where public facilities already exist, because it can be served more efficiently and inexpensively than dispersed or sprawling land use patterns. The GMA dictates that "urban growth should be located first in areas already characterized by urban growth that have existing public facility and service capabilities to serve such development, and second in areas already characterized by urban growth that will be served by a combination of both existing public facilities and any additional needed public facilities and services that are provided by public or private sources" (RCW 36.70A.110).

Providing new capital facilities in previously undeveloped and unserved areas may in turn lead to new development in dispersed patterns, and should also be avoided. The GMA states that "Further, it is appropriate that urban government services be provided by cities, and urban government services should not be provided in the rural area."

The GMA also emphasizes the concept of concurrency, which requires that needed public facilities and services be in place, or officially planned and scheduled to be put into place, concurrent with new development. This concept requires cities and counties to establish explicit levels of service, or minimum threshold measures, to determine if particular service is adequately provided.

New development applications which cause the minimum levels of service to be exceeded will not be approved unless improvements are made to correct the deficiency or unless corrective measures are scheduled and funded to occur within a locally established time frame, up to a maximum of six years. The GMA requires that at a minimum level of service standards be adopted for transportation. Other services should be reviewed for adequacy, but specific threshold standards are not required to be universally applied.

This element is organized into two sections:

- inventory and review of existing facilities and services, along with 6-year future plans for water, sewer, storm drainage, schools, law enforcement, fire, solid waste, libraries, general government buildings, electricity, telecommunications and natural gas services. The Inventory and Capital Facilities Plan for Transportation and Parks can be found in their respective elements; and,
- policies regarding the provision of these services. The policies provide direction in three areas:
    - ensuring the overall provision of needed facilities and services by public or private agencies;
    - providing direction for the establishment of minimum levels of service and concurrency obligations for new developments to assist in the provision of these services; and,
    - ensuring that the provision of services is fully consistent with overall growth management objectives, which is ultimately linked to the ability to efficiently provide the services in the first place.

Emphasis throughout this document is placed on those services provided by Clark County government and, in particular, on transportation, water, sewer and storm drainage services which are mandated by the GMA for direct concurrency requirements. Capital facilities plans for all services provided within individual cities of the county are included within the individual comprehensive plans of Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal and Yacolt, although available information is included in this document for context. The 6-year capital facility and financing summaries are an estimate of future needs and are not official policy or budget documents of the service providers except where indicated.

SERVICES SUMMARIES AND PROJECTED FUTURE NEEDS

- Table 6.1 summarizes who the providers of services are for the various jurisdictions within Clark County. Additional information regarding city services can be found in each jurisdiction's Capital Facilities Element.
- Table 6.2 summarizes the major capital projects, estimated costs and probable funding sources for identified services and utilities. Detailed information on each can be found within the document.
- Table 6.2 attempts to isolate the direct capital costs attributable to Clark County over the next six years. In cases where services are provided by outside agencies, Table 6.2 estimates the direct costs of providing service to county residents only. Table 6.2 also attempts to exclude services constructed by developers as part of the development process, such as road, sewer, water, or storm drainage extensions or improvements.

DIRECT CONCURRENCY SERVICES

Direct concurrency will be applied on a project by project basis for public facilities of streets, water, and sanitary sewer. While the GMA requires direct concurrency only for transportation facilities, this plan extends the concept of direct concurrency to cover other critical public facilities of water and sanitary sewer.

Table 6.1 Providers of Public Services and Utilities in Clark County

SERVICE	BATTLE GROUND	CAMAS	LA CENTER	RIDGEFIELD	VANCOUVER	WASHOUGAL	YACOLT	COUNTY
WATER SUPPLY SYSTEM	City	City	CPU	City	City	City	City	CPU, City of Vancouver
SANITARY SEWER SERVICES	City	City	City	City	City	City	NA	CPU, Hazel Dell S.D., City of Vancouver
SEWAGE TREATMENT FACILITIES	County	City	City	City	City	City	NA	County
PUBLIC SCHOOLS	Battle Ground S.D.	Camas S.D.	La Center S. D.	Ridgefield S.D.	Vancouver, Camas, Evergreen S.D.	Washougal, Camas S.D.	Battle Ground S.D.	NA
FIRE PROTECTION	District 11 and City Fire Marshal	City	District 14	District 12 and City Fire Marshal	City	City	F.D. #13	All non-municipal fire districts
LAW ENFORCEMENT	City	City	City	City	City	City	Sheriff's Department	Sheriff's Department
SOLID WASTE	Private Hauler	City	Private Hauler	Private Hauler	Private Hauler	Private Hauler	Private Hauler	Private Hauler
LIBRARIES	FVRLS	City	FVRLS	FVRLS	FVRLS	FVRLS	FVRLS	FVRLS
GOVERNMENT BUILDINGS	City	City	City	City	City	City	City	County
ELECTRICITY	CPU	CPU	CPU	CPU	CPU	CPU	CPU	CPU
NATURAL GAS	NW Natural Gas	NW Natural Gas	NW Natural Gas	NW Natural Gas	NW Natural Gas	NW Natural Gas	NA	NW Natural Gas

FVRLS--Fort Vancouver Regional Library System, NA--Not Applicable, CPU--Clark Public Utilities

Table 6.2 Summary of Estimated Clark County Capital Facilities Expenditures, 2003-2009

SERVICE OR UTILITY	MAJOR CAPITAL PROJECTS	ESTIMATED COST	FUNDING SOURCES
WATER	Well source and conservation projects	$ 18.9 million	• Systems charges • Contributed capital
SEWER	Treatment plant and interceptor system expansions	$ 59.3 million	• Revenue bond sale
STORM DRAINAGE	Develop regional drainage facilities, complete drainage basin studies	$ 59.8 million	• Future Drainage Utility (or similar mechanism) and systems development charges • Existing drainage fund
SCHOOLS	Land acquisition and construction of new schools, expansion of existing facilities, remodeled and replaced facilities	$ 474.6 million	• Bond levies • Impact fees, where applicable
FIRE PROTECTION[1]	Land acquisition, construction, remodel of stations, and purchase of vehicles	$ 7.1 million	• Bonds • Dedicated tax revenue
LAW ENFORCEMENT/ CORRECTIONS	Expansion of detention facilities, construction of new administrative bldg.	$ 21 million	• General Obligation Bonds • REET • Grants
SOLID WASTE AND RECYCLING	Land acquisition and construction of new compost facility		• User fees • State grants
GOVERNMENT BUILDINGS	Completed administrative space and expanded facilities	$ 41 million	• Bonds financed through REET

1= Includes all Fire Districts except the cities of Vancouver, Camas and Yacolt

Transportation

The capital facilities plan for transportation, including a projection of six-year needs and policies regarding concurrency requirements for the County are included in Chapter 3, Transportation. Transportation services include provisions for roads and associated improvements, transit, and pedestrian and bicycle systems.

Water

Water service is an essential element of all types of land uses. Water supply development must consider the needs of threatened and endangered species. The majority of water users in Clark County are served by public water suppliers. In the urban areas of Clark County, public water is provided by the cities of Vancouver, Battle Ground, Camas, Ridgefield, Yacolt and Washougal, and Clark Public Utilities (CPU), a publicly owned utility which serves unincorporated areas of the county and the City of La Center's water system. The city water districts tend to be slightly larger than current city boundaries, with the exception of the Vancouver service area which extends well beyond city limits.

Extensive water service in the central portion of the county, including both the rural area and urban lands in the Hazel Dell area, is also provided by CPU. In some of the more

remote rural areas of the county where water service is not readily available, CPU manages "satellite systems" which serve small developments and clusters of homes. The seven water providers adopted a Coordinated Water System Plan in 1992 to define service boundaries and establish policies for the provision of water service in the county. For further information on water provisions for the individual cities, refer to the respective city's Comprehensive Plan.

The water providers' systems consist of three basic components: source, storage and transmission. The source for virtually all water in Clark County, public or private, is from groundwater wells. Although adequate water supplies for individual domestic or small consumption commercial wells can be found in most parts of the county, aquifers capable of yielding large amounts of water for extended periods of time are less common. Identifying and developing adequate water supply to meet future demand is essential in order to ensure the continued growth and economic viability of Clark County. Potential future supplies that have been discussed include various surface water sources, water from deeper aquifers, and additional pumping of existing wells. The most prolific aquifers are shallow gravel deposits along the Columbia River in southern Clark County. Individual water providers are required under the federal Safe Drinking Water Act to monitor the water quality of their production wells, subject to the review of the State Department of Health.

Although overall water capacity is ultimately determined by the physical carrying capacity of available sources, the delivery capabilities of individual purveyors are determined by available water rights. Consumptive use of 5,000 gallons per day or more of ground or surface water from a particular source point by any public or private entity requires a water right certificate, to be allocated by the State Department of Ecology. Water rights are prioritized by seniority. In granting such a right, the Department of Ecology must find that no previously established water rights will be hindered.

Clark Public Utilities, the principal purveyor in the unincorporated area, obtains water from 30 production wells in the Hazel Dell and Hockinson areas, with an average total pumping capacity of approximately 18 million gallons per day. To ensure readily available water supplies, CPU also maintains 18 reservoirs comprising a total storage capacity of 8.95 million gallons. Water is distributed to the CPU system users through approximately 300 miles of transmission and distribution piping. Polyvinyl Chloride (PVC) is the predominant material used for the piping, which ranges in sizes of up to 16 inches diameter, with 6 to 8 inches being most common. Water flow is regulated through the system by 26 booster pump stations and 13 pressure reduction valves.

Clark Public Utilities projected future needs and funding sources are summarized in Table 6.3.

Table 6.3 Clark Public Utilities Capital Facilities Plan

PROJECTS	ESTIMATED COST	REASON	FUNDING SOURCE
CONSERVATION	$2,224,367	Concurrency items; needed to maintain adequate water service	System charges, contributed capital approx. 50% each
DISTRIBUTION	9,245,200	Concurrency items; needed to maintain adequate water service	System charges, contributed capital approx. 50% each
HYDRANTS	533,849	Concurrency items; needed to maintain adequate water service	System charges, contributed capital approx. 50% each
PUMP STATION	50,000	Concurrency items; needed to maintain adequate water service	System charges, contributed capital approx. 50% each
STORAGE	844,930	Concurrency items; needed to maintain adequate water service	System charges, contributed capital approx. 50% each
TREATMENT	355,719	Concurrency items; needed to maintain adequate water service	System charges, contributed capital approx. 50% each
WELL SOURCE	5,783,354	Concurrency items; needed to maintain adequate water service	System charges, contributed capital approx. 50% each
TOTAL	$18,987,598		

Source: Clark Public Utilities Water System Plan

Clark Public Utilities is funded by system users, and operates entirely independently of Clark County. CPU indicates that systems charges are user fees applying to old and new utility customers. Contributed capital consists of improvements or moneys provided by new developments as they hook up to the utility system. Total costs through 2023 are estimated at $53,942,158. Over the long-term, systems charges are planned to fund 67 percent of this total, with contributed capital accounting for the remaining 33 percent. This information and related details are included in expanded form in the Clark Public Utilities Water System Plan. The CPU Plan has the necessary contents required by RCW 36.70A.070 (3), including inventories, forecasts, and analyses of future plans and financing mechanisms. Clark County has formally incorporated the CPU Water System Plan by reference into the County Capital Facilities Plan. Future changes made to the CPU Plan should be reviewed for consistency with County plans on an annual basis.

Clark Public Utilities has reviewed the adopted County land use designations and the adopted countywide population target of 534,191 and determined that the CPU Water System Plan is fully consistent with these provisions and the additional service demands which they entail. If growth occurs faster than projected, CPU will utilize a combination of capital reserves, rates, Systems Development Charges and revenue bonds to finance additional projects.

Water is also supplied to individual homes through the use of private wells. The number of private wells in the county has been estimated at 17,000 to 25,000. Use of private wells is subject to the review and approval of the Clark County Department of Health. Although legal, extensive private well usage raises health concerns, particularly in urban or small lot rural areas characterized by widespread septic system use or other activities which can adversely impact groundwater quality. Private wells will continue to be the primary water source in the rural area, but should be aggressively phased out in the urban area as public water becomes fully available. (Readers interested in water service provisions for individual cities within Clark County should refer to the respective city's Comprehensive Plan.)

The collective water provisions of the individual city and outside agency capital facilities plans are consistent with the Land Use Element of the 20-Year Plan. Outside of urban growth areas, there is limited public water provision, and future expansions are generally discouraged by policies of the Land Use and Capital Facilities Elements of the 20-Year Plan. Rural water provision is provided by individual or group private wells, subject to the review of the Clark County Department of Health.

Within unincorporated Urban Growth Areas other than Vancouver UGA the 20-Year Plan Map has designated almost no land for short term urban density development which would require public water service. These UGA lands are affixed with an "Urban Holding" overlay designation, which explicitly precludes urbanization until a site-specific demonstration of serviceability is made. Provision for lands within corporate limits is addressed in the city comprehensive plans.

Within the Vancouver UGA there is a substantial amount of land under County jurisdiction which is designated for near term urban development without the Urban Holding Overlay. The City of Vancouver formally adopted a Capital Facilities Plan in January 1995 specifying how these urban areas would be served. In April 1997 the City Department of Public Works reviewed the adopted County land use designations and the countywide population projection of 534,191, and concluded that projected population in the Vancouver service area can be served by the central facilities listed within the adopted Capital Facilities Plan. Additional line extensions needed to serve the higher population would be financed by development proposals.

Sanitary Sewer/Treatment Plant

Sanitary sewer services in Clark County are provided by the cities of Vancouver, Washougal, Camas, Battle Ground, and Ridgefield, as well as Clark Public Utilities and the Hazel Dell Sewer District. In general, the city sewer districts tend to be slightly larger than current city boundaries and each has its own sewage treatment facilities. Clark Public Utilities owns and operates the sewage system and treatment plant for the City of La Center. For further information on sewer provisions for the individual cities, refer to the respective city's comprehensive plans.

Within the county's unincorporated urban area, sanitary sewer service is provided by the City of Vancouver and the Hazel Dell Sewer District. The Vancouver service area encompasses over 50 square miles, extending well beyond city limits to Vancouver Lake to the west, 202nd Avenue to the east and NE 99th Street to the north. The Vancouver system includes two treatment plants and an industrial pretreatment lagoon.

Clark County no longer provides actual wastewater collection, having transferred operation of its collection systems to the Hazel Dell Sewer District in 1993. The county provides regional transmission of wastewater and treatment services for two wholesale customers, the Hazel Dell Sewer District and the City of Battle Ground. The county owns and operates the Salmon Creek Wastewater Treatment Facility, located near the confluence of Salmon Creek and Lake River.

The Hazel Dell Sewer District encompasses more than 36 square miles and serves approximately 20,000 plus customers within the unincorporated urban area north and northeast of Vancouver, as well as portions of the Orchards area and the Hockinson and Meadow Glade satellite systems. The district's service area is estimated to be developed at 40 percent of full coverage, with approximately half of the land area being physically serviced by sewer. The district contracts with Clark County and the City of Vancouver to

provide treatment services. The County's Salmon Creek Wastewater Facility provides treatment for over 80 percent of the district's wastewater.

Projected needs and funding sources for the Hazel Dell Sewer District are illustrated in Table 6.4. This information and related details are included in expanded form in the Hazel Dell Sewer District Comprehensive General Sewer Plan, March 2001. The HDSD Plan has the necessary contents required by RCW 36.70A.070 (3), including inventories, forecasts and analyses of future plans and financing mechanisms. Clark County has formally incorporated the Hazel Dell Sewer District Comprehensive General Sewer Plan, March 2001. The Hazel Dell Sewer District has reviewed the adopted County land use designations and determined that the HDSD Plan is fully consistent with these provisions and the additional service demands which they entail. Future Changes made to the HDSD Plan should be reviewed for consistency with County plans on an annual basis.

Table 6.4 Hazel Dell Sewer District Capital Facilities Plan, 2003-2009

PROJECTS	ESTIMATED COST	REASON	FUNDING SOURCE
EXISTING SERVICE AREA: TRIBUTARY TO SALMON CREEK TREATMENT PLANT	$7,000,000	Line extensions to serve new and existing development	Contributed capital, ULID, and capital improvement fund
BASIN TRIBUTARY TO VANCOUVER WESTSIDE TREATMENT PLANT	$100,000	Minor line extensions	Contributed capital and capital improvement fund
TOTAL	$7,100,000		

Source: Hazel Dell District Comprehensive General Sewer Plan, March 2001.

The Salmon Creek facility processes sewage in six basic stages. Incoming wastewater is screened to remove large debris and then de-gritted to remove sand particles. The wastewater is then directed to large settling basins called primary clarifiers where solids are removed by gravity. The flow is then sent through aeration basins where air and microbes are added to consume the remaining pollutants. Following aeration, flow is sent to secondary clarifiers where the microbes are removed by gravity. The wastewater is then disinfected with an ultraviolet light process and discharged to the Columbia River.

The operation and discharge from the plant is regulated by the Washington Department of Ecology (DOE). DOE is currently in the process of updating the discharge permit for the plant to recognize capacity constructed in the most recent plant expansion. This permit update will authorize the facility to process an average of 10.3 MGD of sewage during the peak month of the year.

Sustained growth patterns and expansion of the service area tributary to the Salmon Creek facility dictated by current County growth management planning efforts has increased demands on the Salmon Creek Facility and related infrastructure, necessitating further capacity expansion and upgrades in order to meet GMA concurrency requirements and public health and safety needs. The County is currently planning for the next expansion of the facility to be completed by 2008 and providing a peak month capacity of 16.0 MGD. These improvements will be primarily financed by the sale of revenue bonds, with payment on the bond to be backed by the Hazel Dell Sewer District and the City of Battle Ground. The method of repayment will be collected from both existing and new customers. The new capacity will primarily be financed by the Regional Facilities Charge collected from all new

connections to the sewer systems by Hazel Dell and Battle Ground. Some portion of the cost will be borne by existing customers through the monthly sewer fees charged by Hazel Dell and Battle Ground.

The county will also provide parallel additions to one section of the piping and pump stations leading to the treatment plant as part of the next expansion program. These improvements to the regional wastewater conveyance system are also required to serve existing and future demand from growth. Table 6.5 lists the projected 6 year capital improvements required for the County treatment plant and regional conveyance system.

Table 6.5 Clark County Capital Facilities Plan for Sewage Treatment System, 2003-2009

PROJECT	ESTIMATED COST	REASON FOR NEED	FUNDING SOURCE
EXPANSION OF SALMON CREEK TREATMENT PLANT: EXPANSION OF SALMON CREEK FACILITY TO 16.0 MGD	$29.1 Million	Concurrency item; maintain adequate treatment capacity for additional growth	Revenue Bond sale
REGIONAL CONVEYANCE SYSTEM IMPROVEMENTS -GRAVITY INTERCEPTOR -PUMP STATION -PRESSURE MAIN -OUTFALL LINE	 $9.6 million $7.4 million $6.7 million $6.5 million	Concurrency item; maintain adequate conveyance capacity for additional growth	Revenue Bond sale
TOTAL	$59.3 million		

Source: Clark County Environmental Services Division

Unincorporated rural Clark County is served by individual private septic systems. Since 1974 the installation of on-site septics has been regulated by the Clark County Department of Health. The Health Department estimates that over 50,000 septic systems are in use throughout the county, about half of which are located within urban service areas. Septic systems installed prior to 1974 were subject to virtually no regulation. Recent technological advances and the establishment of mandatory maintenance requirements on some subdivisions have limited septic system failure rates. However, the number of septic systems subject to mandatory maintenance requirements remains quite small, even of those installed after 1974. Septic systems will remain the predominant form of sewage disposal within the rural area, but will be replaced with public sewer as it becomes available in the urban area.

The collective sewer provisions of Clark County and the individual city and outside agency capital facilities plans are consistent with the Land Use Element of the 20-Year Plan. Outside of urban growth areas, there is limited public sewer provision, and future expansions are generally discouraged by policies of the Land Use and Capital Facilities Elements of the 20-Year Plan. Rural sewer provision is provided by individual private septic systems, subject to the review of the Clark County Department of Health.

Within unincorporated Urban Growth Areas other than the Vancouver UGA the Comprehensive Plan Map has designated almost no land for short term urban density development which would require public sewer service. These UGA lands are affixed with an

"Urban Holding" overlay designation, which explicitly precludes urbanization until a site-specific demonstration of serviceability is made.

Provisions for lands within corporate limits are addressed in the city comprehensive plans. Within the Vancouver UGA there is a substantial amount of land under County jurisdiction which is designated for near term urban development without the Urban Holding overlay. The City of Vancouver is in the process of updating their capital facilities elements to demonstrate an ability to serve these urban areas in a timely fashion. The City of Vancouver formally adopted a Capital Facilities Plan in January 1995 specifying how these urban areas would be served. In April 1997 the City Department of Public Works reviewed the adopted County land use designations and the countywide population projection of 534,191, and concluded that projected population in the Vancouver service area can be served by the central facilities listed within the adopted Capital Facilities Plan. Additional line extensions needed to serve the higher population would be financed by development proposals.

INDIRECT CONCURRENCY SERVICES

Indirect concurrency services include storm drainage, public schools, parks, fire protection, law enforcement, solid waste disposal, county buildings, electricity, natural gas and telecommunications. These services are necessary to support additional growth to varying degrees, but the have not been identified by the GMA as critical facilities to be applied using direct concurrency standards as is the case with roads, sewer and water facilities.

Storm Drainage

Unmanaged stormwater runoff can result in flooding, elimination of fishery and wildlife habitat, pollution of the county's drinking water supply, and negative impacts to the aesthetics of the county's streams, lakes, and wetlands. The regulation and management of storm drainage in Clark County falls under the responsibility of the local municipalities and Clark County. City governments regulate and maintain the drainage systems within their city limits.

Clark County regulates and manages surface water runoff in the unincorporated areas outside of city limits. The Washington State Department of Transportation (WSDOT) is responsible for the management of runoff from State highways and the effects of this runoff both inside and outside of the State rights-of-way. The 100-year floodplains are designated by the Federal Emergency Management Agency (FEMA), and are managed by the County or individual cities. The U.S. government and the State of Washington, through legislation or administrative actions, greatly influence how the County and its cities are required to regulate and manage storm drainage.

In 1999 Clark County received a Municipal Storm Sewer System permit through the National Pollutant Discharge Elimination System (NPDES). This is issued by the State of Washington Department of Ecology under the authority of the Clean Water Act. This requires the county to take certain actions to preserve and protect the beneficial uses of the water bodies of Clark county. These include planning and constructing capital improvements such as stormwater treatment facilities to remove pollutants from the storm runoff from impervious surfaces such as streets, parking lots and roofs. It also requires the county to require developers to construct stormwater management facilities to reduce and treat runoff from the developed sites.

In order to fund these activities, Clark County has established a stormwater user fee of $33.00/year per housing unit or equivalent. This produces roughly $1,000,000/year for stormwater capital construction as well as funding for such activities as education, enhanced maintenance, and water quality monitoring. The Clean Water Program (CWP) of Public works has initiated construction of capital facilities to meet the NPDES requirements. Due to legal challenges to the fee, it may not be possible to use bonding and other forms of funding leverage to extend the impact of the available funds. As a result, it is anticipated that funded construction activities will be roughly $1,000,000/year in the near future.

Estimating future drainage needs is complicated by the changing state and federal mandates, public expectations and evolving research regarding storm drainage and its impacts to water quality. The county has regulated drainage flow since 1978, but has required treatment of runoff only since 1990.

The county currently owns and operates an estimated 35 regional water quality collection facilities which serve more than one development each and owns or maintains about 440 of the smaller single development facilities. Significant savings can be achieved through the planning and implementation of larger facilities, rather than use of a piecemeal approach. The principal capital costs facing Clark County in both the six and 20-year horizons are the construction of these regional facilities and the completion of drainage basin studies.

It is also difficult to precisely estimate what portion of drainage facilities needed will be constructed by developers through the subdivision process, and what portion must be constructed by the County. The 2000 County stormwater ordinance requires that all stormwater impacts from new developments be addressed on site. The ordinance may change in the future to allow for the provision of off-site water quality facilities, to allow for economies of scale through the use of a smaller number of large facilities.

It is anticipated that the stormwater mitigation for private development will continue to be financed by the development community, though opportunities will be sought to achieve private-public partnerships where feasible. Public construction will mitigate it's stormwater impacts as part of the project funding, such as the road fund. The remaining need is for retrofit where there is need for mitigation of cumulative impacts that result from prior urbanization that may not have been fully controlled through onsite measures.

Technical basin studies and analyses are needed, as a matter of law as well as science, to calculate the proportional impact that individual developments will have on a particular regional drainage facility. The county's six year projections for storm water facilities, as required by the GMA, are as follows in Table 6.6.

Through 2012, the County Water Quality Division estimates the total cost of capital projects needed over the 20-year planning horizon of the GMA to be approximately $170 million. The annual maintenance costs, not usually considered as a capital expense, are estimated to be at least $2 million per year. (Readers interested in storm water provisions for individual cities within Clark County should refer to the respective city's comprehensive plan.)

Table 6.6 Stormwater Retrofit Capital Needs

PROJECTS	ACRES	ESTIMATED COSTS
ESTIMATED RETROFIT NEEDS(1) 2004-2010	1,900	$58,000,000
STORMWATER PLANNING NEEDS 2004-2010		$1,800,000
TOTAL		$59,800,000

Source: Clark County Water quality Division

(1) Acres of impervious area currently without BMP's, includes cost for mitigation of cumulative effects, rate of required capital retrofits may vary on NPDES permit renewal requirements, Excludes mitigation for new public or privately constructed projects, based on 6 years cost for 20-year program.

Public Schools

In addition to their primary educational function, public schools serve as a community focal point and provide facilities used for a variety of community civic and recreational needs. Schools are not required as a mandatory concurrency item under the GMA, but are required by existing state law under RCW 58.17.110 to be adequately provided for before land divisions may be approved.

Educational services to elementary, junior and high school students in Clark County are provided by nine different schools districts, which are operated and funded independently of county or municipal government. Depending on district eligibility, some districts pay for a portion of the costs of capital facilities with funds provided by the State of Washington through the State Construction Fund. The remaining capital expenses must be raised locally, through the passage of bond levies, which raise the property taxes of all residential property owners within a particular district, and/or impact fees, which apply to new residential construction within the district. The school districts each prepare enrollment projections and plans for new facilities based on the comprehensive plans of the jurisdictions in which they are located. The school planning horizon is typically 5 to 10 years.

State funding regulations result in new facilities usually being constructed after growth has occurred and a need can be demonstrated. School districts also are cautious not

to overbuild permanent buildings since the average lifespan of a school is fifty years and growth may significantly increase and decline during that time. For these reasons, "portable" or "temporary" classrooms are common in fast growing districts.

To meet minimum facility standards set by state and federal agencies, schools typically require relatively large sites of at least 10 acres for elementary schools, 20 acres for middle schools and 40 acres for high schools. These space requirements, land acquisition costs, area to be served, access and size, are significant factors considered by school districts in siting new facilities. Schools typically require a full range of urban services including public sewer, water, fire and police service.

Table 6.7 provides a summary of current school district facilities. Table 6.8 provides a summary of the number of new school facilities that will be needed in the next six years based on population growth in these areas.

Higher education facilities within Clark County include Clark College, a 2-year institution and Washington State University campus (WSU). Pursuant to an adopted Master Plan, WSU continues to develop the Salmon Creek area campus. Refer to individual city's comprehensive plan for further information on individual school districts as appropriate. Further information on school district projections not covered in the comprehensive plans may be obtained from the individual school district.

Table 6.7 Summary of Existing School District Facilities for All Clark County Schools

SCHOOL DISTRICTS	NUMBER OF SCHOOLS AND STUDENTS						
	ELEMENTARY		MIDDLE/JUNIOR		SENIOR		OTHER SCHOOL FACILITIES
VANCOUVER GRADE LEVEL	21 K-5	9,886	6[1] 6-8	5,191	6[2] 9-12	6,792	9
EVERGREEN GRADE LEVEL	20 K-5	11,118	6 6-8	5,560	4 9-12	7,049	7
BATTLE GROUND GRADE LEVEL	6 K-4	4,102	5 5-8	3,390	5[3] 9-12	4,406	6
CAMAS GRADE LEVEL	5 K-6	2,333	1 7-9	1,041	1[4] 10-12	925	3
RIDGEFIELD GRADE LEVEL	2 K-6	902	1 7-8	309	1 9-12	602	4
WASHOUGAL GRADE LEVEL	3 K-5	1,124	2 6-8	654	2 9-12	867	2
HOCKINSON GRADE LEVEL	2 K-2, 3-5	940	1 6-9	613	1[5]	77	2
LA CENTER GRADE LEVEL *6TH GRADE MISSING*	2 K-1, 2-5	520	1 6-8	313	1 9-12	502	3
GREEN MOUNTAIN GRADE LEVEL	1 K-8						

[1] Includes 5 standard middle schools, and Fir Grove Children's Center, a combined elementary/middle/high special educational school (actual student enrollments are counted in their respective categories).

[2] Includes 5 standard high schools, and Vancouver School of Arts and Academics, a combined middle/high school (actual student enrollments are counted in their respective categories).

[3] Includes one alternative high schools, one high school magnate, and one K-12 alternative program (actual student enrollments are counted in their respective categories).

[4] Camas School District is finishing construction on a new high school that will be open in the fall of 2003. Students at the existing high school and ninth graders that are attending classes at the middle school will attend the new high school in the fall. The existing high school will become a second middle school.

[5] Hockinson School District is finishing construction on its first high school. Ninth and tenth graders in the district will be attending classes in the new high school in the fall of 2003.

Table 6.8 Combined School Districts Capital Facilities Plan, 2003-2009

SCHOOL DISTRICT	NUMBER OF ADDITIONS OR EXPANSIONS/REMODELS			ESTIMATED COSTS IN MILLIONS	FUND SOURCE	
	ELEMENTARY	MIDDLE/ JUNIOR	SENIOR	6-YEAR EXPANSION	SECURED	UNSECURED
VANCOUVER	7 exp 2 exp 2 new	1 new	1 rem[6]	$116.9	Bond and State Match $87.5m	State Match, Bonds, Impact Fees $29.4m
EVERGREEN	3 new and two property	1 new and one property	1 new and one property	$123.8m	Bond, State Match, and Impact Fees$97.6m	State Match, Bond and Impact Fees $26.2m
BATTLE GROUND	2 new	2 new	1 exp[7] 1 new[8]	$89.3[9]	Impact Fees $.2*m	Bond $51.2m, St. Match $33.8m; Imp. Fees $.2
CAMAS	1 new[10]	1 rem[11]	1 new[12]	$55.5m	Bond $43m;State Match $8.3m; Impact Fees $.1m	State Match, Bonds, Impact Fees $4.1m
RIDGEFIELD		1 rem	1 new	$31.2m	Impact Fees $.3m	Bond $26m Impact Fees $.6m State Match $4.9m
WASHOUGAL	1 new			$12.8m	Impact Fees $1.1m	State Match, Bond, and Impact Fees $11.7m
HOCKINSON	1 exp	1 exp	1 new [13]	$22.2	Bond and State Match $22m	State Match, Bond, Impact Fees $.2m
LA CENTER	2 exp	1 exp	1 exp	$22.5m[14]	Bond $12.8m State Match $6.8m Impact Fees $.1m	Impact Fees, grants or donations $2.8m
GREEN MT.	1 exp			.4m		

Source: Preston/Gates/Ellis, Clark County School Districts Capital Facilities Plan
Exp= Expansions, Rem =Remodel, Rep=Replaced, M=Million, For more specific information, see each School District's Individual Capital Facilities Plan.
** Projection based on development pattern assumptions; may decline if the number of new building permits decreases.*

[6] *The Vancouver School of Arts & Academics, a combined middle/high school.*
[7] *Battle Ground School District may add a new high school auditorium.*
[8] *Alternative high school.*
[9] *Includes $4.8m for the cost of portables.*
[10] *If grades are not reconfigured, Camas School District will build an elementary school. If grades are reconfigured, the District will expand the high school.*
[11] *Camas High School converted to middle school.*
[12] *Camas School District is finishing construction on a new high school that will be open in the fall of 2003. Students at the existing high school and ninth graders that are attending classes at the middle school, will attend the new high school in the fall. The existing high school will become a second middle school.*
[13] *Hockinson School District is finishing construction on its first high school. Ninth and tenth graders in the district will be attending classes in the new high school in the fall of 2003*
[14] *Includes other District – wide improvements, such as modernization of the K-8 Multipurpose Building, and relocation of the maintenance and bus facility.*

Parks

Chapter 7, Parks, Recreation, and Open Space provides a complete overview of the Clark County system. Additional information representing the priority capital projects for the Clark County Parks and Recreation Division are presented in the Clark County Parks Master Plan, 2000.

Fire Protection/Suppression

Fire protection in Clark County is provided by a combination of sources. Urban area service has been historically provided by city fire departments, while various fire protection districts serve the unincorporated areas. The Washington Department of Natural Resources (DNR) provides protection for all state trust lands located in the forested portions of in the eastern and northern ends of the county. The USDA Forest Service provides protection for the small portion of the Gifford Pinchot National Forest located in the far eastern area of the county.

In addition to providing fire protection, all districts provide emergency medical services (EMS) and basic life support and/or advanced life support. The City of Vancouver also operates the only hazardous materials response team in the County. EMS calls have constituted an increasing portion of the fire districts' activities and responsibilities, at increasing cost.

Clark County has grown rapidly since 1980. Most of this growth has occurred outside of the city boundaries in what were once the more rural sections of the county. Virtually every fire district has experienced some urban type growth without adequate increases in funding to compensate for increasing customer demands. Annexation by cities further erodes Fire District revenues. This impacts the districts' ability to deliver basis services. Fire districts within or adjacent to urban areas have changed their service delivery to reflect the need to protect a growth community whose residents desire urban levels of service.

There has been a trend towards increased coordination and cooperation among the various fire and emergency service providers in recent years, and greater integration will be needed in the future. This will involve the joint use stations or other facilities, or even the merging of Fire Districts in certain cases. There will likely be increased consistency of standards and levels of services provided among the various districts, with the County Fire Marshal likely playing a larger coordinative and oversight role. Fire protection and suppression services are in the process of becoming more proactive and preventative, rather than strictly reactive as has often been the case in the past. There will likely be increased incentives or regulatory measures to decrease the likelihood of fires occurring, such use of fire restrictive materials in all areas, or land use restrictions in fire-prone areas, as well as on-site means such as greater use of sprinklers to suppress those fires that do occur. Estimated capital facility needs through 2008 are listed in Table 6.9.

Table 6.9 Fire Protection Estimated Capital Expenditures by Fire District, 2003-2008

FIRE DISTRICT	PROJECTS	COST	PROJECTED FINANCING SOURCES
F #1 *(WASHOUGAL AREA)*	1 new vehicle and related equipment	$375,000	General bonds and/or dedicated tax revenues
F #3 *(BRUSH PRAIRIE AREA)*	2 remodel; 4 new vehicles	$1,300,000	Same as above
F #6 *(HAZEL DELL AREA)*	2 new buildings; 2 new vehicles	$1,050,000	Same as above
F #9 *(CAMAS AREA)*			Same as above
F #10 *(AMBOY AREA)*	4 new vehicles	$600,000	Same as above
FD #11 *(BATTLE GROUND AREA)*	1 new building (see FD #6), 1 remodel	$530,000	Same as above and SEPA Fees
FD #12* (RIDGEFIELD AREA)	1 new building	$3,200,000	Same as above
FD #13 *(YACOLT AREA)*			Same as above

*Source: Clark County Fire Districts and Fire Departments, August 2003. * Fire District #14 merged into District #12.*

Law Enforcement/Corrections

The Clark County Sheriff's Office provides law enforcement services throughout the unincorporated area and in the Town of Yacolt. The cities of Camas, Washougal, Battle Ground, La Center, Ridgefield and Vancouver are served by municipal police departments. There is extensive cooperation between the cities and the county law enforcement forces involving shared facilities and provisions for mutual back-up in emergency situations. The Washington State Patrol has police jurisdiction on all state routes within the county, and is largely responsible for state facilities. The state also provides back-up for the Clark County Sheriff's Department and local jurisdictions' forces.

The primary law enforcement facilities used by Clark County are the Clark County Law enforcement Center (main jail), the Juvenile Detention Center, and the East, West and Central Precincts. An agreement has been drawn up for the City of Vancouver and Clark County to share the East Precinct upon the annexation of Cascade Park and Evergreen areas. The Sheriff will continue to provide patrol and enforcement functions for the next three years through a interlocal agreement. Regional or shared Law enforcement and correction facilities including the main jail, the Juvenile Detention Center, The Clark-Skamania Drug Task Force (Task Force) headquarters building, the new 911 Emergency Center (CRESA and a leased facility for the Child Abuse Intervention Center (CAIC). These last three (3) agencies (Task Force, CRESA and CAIC) are inter-jurisdictional. In addition to these regional facilities, Vancouver, Camas, Washougal and Battle Ground each has their own jail/holding facility. Larch Corrections

Center, the only state detention facility in Clark County, is an all-male minimum security facility that houses 164 inmates.

Demand for law enforcement services is directly related to the population and employment for the area. Most of the growth in Clark County has occurred in the unincorporated, largely rural sections of the county. As a result, the Clark County Sheriff's Office has experienced the greatest increase in demand/need for services.

The traditional measure of levels of law enforcement services is the ration of officers to population served, which is a personnel and non-capital issue. Using the number of sworn officers as a measure of staffing is also becoming outdated as non-sworn personnel are being increasingly used to deliver services such as community policing, problem solving and clerical functions. The level of law enforcement service for Clark County is increasingly evaluated based upon a demand or workload indicator, like calls for service and performance outcomes like crime clearance rates. Most calls for police assistance are associated with places of residences rather than the workplace or commercial areas.

Solid Waste Disposal

Solid waste collection and recycling operations in Clark County and its associated cities are conducted almost entirely by private contractors. Within the unincorporated portions of the county these services are conducted by one private company under the regulatory authority of the Washington Utilities and Transportation Commission (WUTC). Clark County has no authority to directly contract for solid waste collection services, other than for the collection of residential recyclable materials. Cities and towns have the option to contract directly for collection services, provide the collection themselves or defer regulation to the WUTC. Currently, Battle Ground, La Center and Yacolt defer collection company regulation to the WUTC. Vancouver, Ridgefield and Washougal contract their services to private haulers, while the City of Camas provides its own garbage collection.

Waste collected by the WUTC certified haulers, city contracted haulers, and self-haulers is initially disposed of at the Central Transfer and Recycling Center or the West Van Materials Recovery Center (West Van) in Clark County for further processing and recovery of recyclable materials. Non-recyclable waste is transported for final disposal to the Finely Buttes Landfill in Morrow County, Oregon. The transfer facilities, landfill and transportation of materials are operated by the Columbia Resource Company (CRC). The CRC system replaced the in-county Leichner Landfill which closed on December 31, 1991.

Currently, curbside collection of a variety of recyclable materials is provided to residents at varying service levels within all of the cities and the urban and non-urban areas of unincorporated Clark County. Recyclable materials collected through county/city curbside collection programs are delivered and processed at the West Van facility.

Residential curbside collection of yard debris is also provided at varying service levels in the cities of Vancouver, Battle Ground, Camas, Washougal and the urban areas of unincorporated Clark County. Yard debris collected in Clark County is currently either composted in relatively low cost open windrows at one of several yard debris composters in the Clark County/Portland Metro area or used as a source of fuel in industrial burners.

Two fixed household hazardous waste collection facilities are located at the CTR and West Van facilities. Another facility is at Burlington Environmental Services in Washougal. These facilities are open to the public and accept household hazardous waste from county residents at no charge.

The County has recently updated the Clark County Comprehensive Solid Waste Management Plan. This plan is used to establish management strategies for the handling,

utilization and disposal of solid waste. It identifies waste reduction, source-separated recycling, and waste separation programs as priority management tools. The updated Plan includes recommendations to: 1) expand the solid waste system to include an east county transfer station for transportation and cost efficiencies; 2) focus on the diversion and recovery of food waste and composting of this waste; 3) continue to rely on the private sector to fund and finance such capital improvement projects; and 4) discourage local (in-county) landfills.

The Clark County Comprehensive Solid Waste Management Plan states that "population centers in the eastern part of the county are located at least 18 miles from the two existing transfer station", and that an objective of establishing a third transfer station in the area of Washougal-Camas is contemplated. The existing long-term contract with CRC includes a provision for them to develop a new transfer station in eastern Clark County. It is anticipated that the new station would improve convenience for some residents and businesses and that diversion of east county wastes to a new facility would free up some capacity at the two existing facilities. In 2003, discussions are underway between Clark County, east county host communities, and CRC about the new facility.

Public Safety Communications

The County, through CRESA, researched a public safety communications upgrade county-wide for many years. As a part of the FY 1996 budget the Commissioners approved a capital budget program of $13.5 million, to upgrade the public safety communications system. Over a two-year period, an 800 MHz trunked radio system, purchased from Motorola Communications and Electronics was installed. The system is a Clark County owned proprietary system that is compatible with the Portland, Washington County, and future Clackamas County, Oregon systems.

General Government Buildings

Clark County presently owns or rents 3 buildings comprising almost 28,021 square feet of total floor space, as indicated in Table 6.10. All but 2,670 square feet is used for various types of storage and warehousing. The rest of the space used by the County is County owned as outlined in Table 6.10.

Population growth projected through 2023 may require additional space for office, court rooms, detention, maintenance and storage uses. The three (3) highest priority needs are for detention space through expansion, remodel, of the Juvenile Detention Center and special detention needs.

Table 6.10 Existing County Buildings

COUNTY OWNED - COUNTY OCCUPIED		OTHER OWNED - COUNTY OCCUPIED	
BUILDING	SQUARE FT	BUILDING	SQUARE FT
1408 FRANKLIN	24,953		
911 EMERGENCY SERVICES CENTER	18,000		
78TH STREET OFFICES	48,464		
CENTER FOR DEATH INVESTIGATION	6,100	MULLIGAN BUILDING	11,351
CLARK COUNTY COURTHOUSE	82,022		
CORRECTION CENTER	165,970		
FRANKLIN COURT	25,000		
GENERAL SERVICES BUILDING	16,000		
JUVENILE	47,350	EAST PRECINCT	2,670
MABRY	3,360	FACILITIES WAREHOUSE	4,000
TASK FORCE HEADQUARTERS	4,100		
TRIPLEX	2,460		
PSC BLD	158,000	SHERIFF'S EVIDENCE	10,000
149TH STREET / CENTRAL PRECINCT	2,200		
TOTAL	604,315	TOTAL	28,021

Juvenile Detention

Clark County has recently completed construction of 80 new beds in a $10 million addition to the existing Juvenile Facility. The current facility is located on a block in downtown Vancouver bordered by 12th street, Franklin street, Esther street and 11th street.

Adult Detention

Clark County has recently completed construction of 400 new work release beds in an $11 million dollar work release center located on Lower River Road.

Administration Space

Clark County has recently completed construction of 158,560 square feet of new administration space. The new Public Services Building and adjoining 510 space parking garage were completed in December of 2002. The $41 million dollar campus improvement project is still currently underway with the remodel of the Clark County Courthouse, 1408 Franklin Street Building, and Franklin Center.

Coordination with Other Plan Elements

In the event that funding is insufficient to meet the capital needs for any of the above described projects, a reassessment of the land use element and other elements of the capital facilities plan will occur. Other funding possibilities and levels of service will also be reassessed. This will be done to make certain appropriate action will be taken to ensure the internal consistency of the land use and capital facilities portions of the plan.

Electricity

Electric service throughout Clark County is provided by Clark Public Utilities (CPU), a customer-owned public utility district. About half of the power the utility sells its customers is generated at the River Road Generating Plant, a combined-cycle combustion turbine that uses natural gas to produce electricity. The remaining power supply is purchased, mainly from the Bonneville Power Administration, a federal agency that markets power generated at federal dams in the Pacific Northwest.

Clark Public Utilities has invested about $500 million in its electric system. The system consists of more than 100 miles of high-voltage transmission lines (69,000 and 115,000 volts), 47 substations, three switching stations and about 6,000 miles of overhead and underground distribution lines. The facilities serve about 162,000 customers. The utility has administrative offices in its Electric Center, 1200 Fort Vancouver Way, Vancouver. Engineering and operations functions are located at the Ed Fischer Operations Center, 8600 N.E. 117 Avenue. These facilities are located primarily in the urban area of Clark County. Most of the rural area is served with minor facilities.

The utility routinely reviews the county's growth plans and coordinate the construction of new electrical facilities with those plans. Major electrical facilities are in place to serve existing utility customers, however additional substations, transmission lines and distribution facilities will be required to meet the needs of new customers. It should be noted that state law requires utilities to provide electricity to all who request it.

The utility believes it has adequate supplies of electricity to meet anticipated customer demands. Utility officials routinely prepare projections of future demand for electricity, and review available supplies. When projections show that demand for electricity will exceed the available supply, the utility will conduct extensive evaluations of the available options. The major options are to build additional electrical generating capacity, purchase additional supplies of electricity, or expand electricity conservation programs to reduce demand for power. Any one or a combination of the options could be selected.

Natural Gas

Granted its service territory by the Washington Utilities and Transportation Commission, Northwest Natural Gas is the sole purveyor of natural gas in Clark County. The company serves about 50,000 residential, commercial and industrial gas customers in the county. Its customer base has grown rapidly over the past 10 years, reflecting a strong preference by builders for natural gas heating in new homes as the county's residential population increases.

Northwest Natural Gas receives its supply from Northwest Pipeline, which owns and operates more than 7,000 miles of interstate pipelines, including lines in Clark County. Northwest Pipeline's current and future need is to keep its pipeline corridors accessible for maintenance.

Despite recent fluctuations in energy prices, as the local distribution company of natural gas, Northwest Natural anticipates continued strong growth in customer additions in

Clark County and is planning for future infrastructure construction and maintenance to serve the expected need. Additional distribution lines will be constructed on an as-needed basis in accordance with local, state and federal regulations and codes covering land use and safety issues.

Public safety has been the number-one consideration in the siting and construction of new pipelines, as reflected by natural gas' superior safety record in the pipeline industry. The growth of new development and housing subdivisions in Clark County to be served by natural gas will only increase the need for stringent adherence to safety and maintenance standards for the building and operation of transmission and distribution lines

Telecommunications

The telecommunications industry is currently in the midst of tremendous advances in technology. Cellular and optical fiber technologies are transforming the way service is delivered. In addition, the physical barriers that separate data, video, and voice technologies are rapidly disappearing. With the breakup of AT&T in 1984, new technology and new providers have entered the market at a rapid pace.

These changes have fostered a competitive industry. Three local telecommunication companies provide service to Clark County residents. These companies are Qwest Communications (Qwest), General Telephone (GTE), and Lewis River Telephone Company.

The three telephone companies serving the Clark County area are integrating fiber optic cable into their current system. All major cities in the Qwest service area within Clark County had fiber optic cable in place by 1992. Copper cable is still being used to connect fiber optic lines to customers unless warranted by special customer needs. The decision to place fiber optic cable is based on the Qwest office location, the customer location, and the capacity needs of the customer.

GTE has fiber optic lines in the Camas, Washougal, and Washougal River area. Fiber optic lines are also placed between Camas and the RCA Sharp plant located in northwest Camas. At the GTE and Qwest Communications border west of the RCA Sharp plant, the existing copper lines were replaced with fiber optic cable. The total fiber optic cable within GTE's service area in Clark County is estimated at 10 to 20 miles, which is a small percentage compared to existing copper lines. Fiber optic lines were not placed at all during 1992 and 1993. Since 1993, placement is occurring on a year to year basis.

Lewis River Telephone Company currently has seven miles of fiber optic cable. Thirty miles are planned to be placed by the end of next year. This number is estimated to be less than two percent of the total miles of existing copper lines.

As detailed in the Transportation Element, Chapter 3, telecommunications will play an increasingly important role in the transportation demand management strategy of Clark County. This will require a substantial commitment to telecommuting and its related communication technology. In general, GTE and Lewis River should be able to meet the growing demand for telecommunications services. However, the county will need to work with providers to assure that employers know the benefits of telecommuting in the work place.

Libraries

The Fort Vancouver Regional Library District (FVRLD) serves an area of approximately 4,200 square miles and nearly 383,000 people in four counties. The district is diverse in its service requirements, ranging from rural bookmobile service to the depth and breath of services provided at Vancouver Community Library, the district's main library.

Currently, the district provides a total of 69,400 square feet of library space in eight branches serving Clark County, which translates into a ratio of .2 square feet per capita. The following Table 6.11 is a list of existing FVRL library space serving Clark County.

Table 6.11 Ft. Vancouver Libraries

Ft. Vancouver Community Library	Square Footage
Vancouver	36,000
Vancouver Mall	7,200
Cascade Park Community Library	2,500
Three Creeks Community Library	13,000
Ridgefield	2,055
Washougal Community	2,400
Battle Ground Community	3,870
Woodland Community	2,375
Total	69,400 sf

Source: FVRL Capital Facilities Plan

There are various measurements used to establish library service standards. One of the key indicators of service is based on the ratio of public library space per capita. In 1996, FVRL had a capital plan study completed by The BJSS Group (study was updated in 1999) that used an existing desired standard of .5 square feet per capita for the district.

The 20-year capital facilities plan for library services in Clark County defines an urban service model and a rural service model. If funded, this plan would increase the current 69,400 total square feet to a projected 215,500 square feet by the year 2020, to serve Clark County's projected population of 465,000 and result in a service area ratio of approximately .46 square feet per capita, slightly less than the .5 square foot previous benchmark. The implementation of a comprehensive 20-year capital plan designed to meet anticipated growth for Clark County would include the development of the following new or expanded facilities shown in Table 6.12.

Table 6.12 Ft. Vancouver Library 20-Year Capital Plan

Library Expansion	Increased Square Footage	Estimated Cost
Expanded Vancouver Main Library	92,000	$34,500,000
New Evergreen Community	25,000	$9,000,000
New Vancouver Mall/Orchards Community	25,000	$8,750,000
New Hazel Dell Community	15,000	$5,250,000
New NE Community	25,000	$8,750,000
Complete La Center Community	2,500	$875,000
New Battle Ground Community	15,000	$5,250,000
Expanded Ridgefield Community	5,000	$1,750,000
Expanded Washougal Community	5,000	$1,750,000
New Woodland Community	6,000	$2,100,000
Total Branch	215,000	$77,975,000
District Operations Center	50,000	5,000,000
Total FVRL	265,500	$82,975,000

Source: FVRL Capital Facilities Plan

GOALS AND POLICIES

State Goals and Mandates

The statewide planning goals were adopted in 1990 as part of GMA. Included within the 13 goals was the mandate to ensure that public services and facilities necessary to support development shall be adequate to the development (RCW 36.70A.020).

Community Framework Plan

Both the policies within the Countywide Planning Policies and the Community Framework Plan (CFP) frame the issues and needs for the 20-Year Plan with regards to capital facilities. See Section 6.0 of the CFP for these policies.

6.0 Countywide Planning Policies

6.0.1 The County, State, municipalities and special districts shall work together to develop realistic levels of service for urban governmental services.

6.0.2 Plans for providing public facilities and services shall be coordinated with plans for designation of urban growth areas, rural uses, and for the transition of undeveloped land to urban uses.

6.0.3 Public facilities and services shall be planned so that service provision maximizes efficiency and cost effectiveness and ensures concurrency.

6.0.4 The County, municipalities and special districts shall, to the greatest extent possible, agree upon present and future service provision within the urban area.

6.0.5 The County, municipalities and special districts shall agree on a full range of services to meet the needs of the urban area, including sewer, water, storm drainage, transportation, police, fire, parks, etc.

6.0.6 The County, its municipalities and special districts shall work together to ensure that the provision of public facilities and services are consistent and designed to implement adopted comprehensive plans.

6.0.7 Local jurisdictions shall establish a process to re-evaluate the land use element of their comprehensive plans upon its determination that the jurisdiction lacks the financing resources to provide necessary public facilities and services to implement their plan.

6.0.8 General and special purpose districts should consider the establishment of impact fees as a method of financing public facilities required to support new development.

6.0.9 The County, its municipalities, and special districts will work together to develop financial tools and techniques that will enable them to secure funds to achieve concurrency.

6.0.10 The Comprehensive Plan of the County and each municipality shall include a process for identifying and siting essential public facilities such as airports, state education facilities and state or regional transportation facilities, state and local correctional facilities, solid waste handling facilities, and regional parks.

6.0.11 When siting state and regional public facilities, the County and each municipality shall consider land use compatibility, economic and environmental impacts and public need.

6.0.12 The County shall work with the State, each municipality and special districts to identify future needs of regional, and state wide public facilities. This will ensure county-wide consistency and avoid duplications or deficiencies in proposed facilities.

6.0.13 The County, municipalities, special districts and Health District will work cooperatively to develop fair and consistent policies and incentives to: eliminate private water and sewer/septic systems in the urban areas; and to encourage connection to public water and sewer systems.

6.0.14 Within Urban Growth Areas, cities and towns should be the providers of urban services. Cities and towns should not extend utilities without annexation or commitments for annexation. Exceptions may be made in cases where human health is threatened. In areas where utilities presently extend beyond city or town limits, but are within Urban Growth Areas, the city or town and the County should jointly plan for the development, with the County adopting development regulations which are consistent with the city or town standards.

6.0.15 Plans for providing public utility services shall be coordinated with plans for designation of urban growth areas, rural uses, and for the transition of undeveloped land to urban uses.

6.0.16 Public utility services shall be planned so that service provision maximizes efficiency and cost effectiveness and ensures concurrency.

6.0.17 The County, municipalities and special districts shall, to the greatest extent possible, agree upon present and future service provision within the urban area.

6.0.18 Establish a stormwater treatment plan for existing and future developments that complies with salmon recovery objectives.

20 Year Plan Policies

GOAL: Ensure that necessary and adequate capital facilities and services are provided to all development in Clark County in a manner consistent with the 20-Year Plan.

6.1 Policies

6.1.1 Continue to plan for and provide capital facilities and services as necessary to support development consistent with the 20-year Plan, or coordinate and facilitate the planning and provision of such facilities and services by other public or private entities.

6.1.2 The primary role of Clark County regarding service provisions shall involve the planning and delivery of regional, rather than urban, services. It is the policy of Clark County that, in general, cities are the most appropriate units of local government to provide urban governmental services, and that, in general, it is not appropriate that urban governmental services be extended or expanded to rural areas except in those limited circumstances shown to be necessary to protect basic public health and safety and the environment and when such services are financially supportable at rural densities and do not permit urban development.

6.1.3 Explore and assist other providers to explore a variety of funding sources for capital facilities and services, including a range of federal, state, and other grants where possible.

6.1.4 Encourage and assist other utilities, service districts and providers to pursue the use of impact fees, special assessment and improvement districts and other local financing techniques to fund new facilities and services.

6.1.5 Assist and facilitate the siting of capital facility and service infrastructure in a manner consist with the 20-Year Plan, through appropriate land use planning and development review policies and procedures.

6.1.6 Develop a process for identifying and siting essential regional public facilities such as state or regional transportation facilities, state education facilities, airports, corrections facilities, solid waste handling facilities and regional parks.

6.1.7 Clark County incorporates by reference the sewer and water Capital Facilities Plans of the Hazel Dell Sewer District, Clark Public Utilities, and the City of Vancouver. The County should review future changes to these Capital Facilities Plans on an ongoing basis to ensure that consistency with County capital facility and land use plans is maintained.

GOAL: Provide water service to all households minimizing environmental impacts and, at least, long-term public cost.

6.2 Policies

6.2.1 All new development in the urban area shall be served by a connection to a public water system. Existing developments within the urban area using private wells shall be encouraged to convert to public water usage.

6.2.2 Private wells may be used in the rural area, subject to the review of the Clark County Department of Health.

6.2.3 In cases where public water service is needed, it shall be provided by a water purveyor under the following order of preference, articulated within the Coordinated Water System Plan (CWSP):

- Direct or satellite service by the water utility designated by the CWSP to serve the area.
- Interim or permanent service by an adjacent water utility. CWSP service area designations shall be adjusted if permanent service is arranged.
- Satellite service on an interim basis by CPU, if the development to be served is located outside CPUs service territory.
- Formation of a new utility and construction of a new public water system to serve only the development. CWSP service area shall be adjusted to reflect the change.

6.2.4 The CWSP shall be reviewed and updated at a minimum of every five years. Design standards included in the CWSP shall be reviewed and amended annually, if necessary.

6.2.5 CPU shall continue to be recognized as the satellite water system management agency for Clark County.

6.2.6 Clark Public Utilities may construct and manage satellite water systems within the service territory of other water utilities, but only if a prior agreement is reached with the utility designated by the CWSP to serve the area. Such agreements shall address issues of equipment compatibility, asset transfer and other issues deemed necessary by the parties.

6.2.7 Major water utilities, including Clark Public Utilities, may construct extensions of existing services in the rural area only if service is provided at a level that will accommodate only the type of land use and development density called for in the 20-Year Plan, recognizing maximum buildout and reasonable allowances in design of facilities to promote overall system efficiency. Extension of water service shall be permitted to public regional park facilities that are outside of but adjacent to an urban growth boundary.

6.2.8 Water transmission lines constructed in rural areas for the purpose of connecting water systems shall be limited from use for tributary line tie-ins.

6.2.9 The CWSP shall be amended to reflect any water service extensions in the rural area.

6.2.10 Developments shall demonstrate a sufficient and sustainable source of water before development approval is issued.

6.2.11 Water service plans shall be coordinated with the adopted 20-Year Plan map and policies, including the designation of urban growth areas.

6.2.12 Work with other cities and special districts to develop fair and consistent policies/incentives to eliminate private water systems in urban areas, and to encourage connection to public water systems. Unused wells should be identified and decommissioned.

6.2.13 Practice and encourage water conservation.

6.2.14 Work with water service providers to encourage public education and outreach programs on water reuse, conservation, reclamation and other new water efficient technology.

6.2.15 Encourage water pricing structures to facilitate conservation and to cover the full cost of providing water service.

GOAL: Provide sewer service within urban growth areas efficiently and at least public cost.

6.3 Policies

6.3.1 All new development in the urban area shall be served by a connection to a public sewer system.

6.3.2 Develop strategies for the conversion of on-site septic disposal systems to public sewer use in the urban area.

6.3.3 New and existing development in the rural area outside of rural centers shall use individual on-site septic disposal systems, unless public sewer is available. New or existing development within designated rural centers may use community septic systems.

6.3.4 Installation of new individual or community septic systems shall be subject to the approval of the Clark County Health Department (CCHD). Installation approvals for new septic systems shall include agreements for mandatory future monitoring unless waived by the CCHD.

6.3.5 Require regular inspections of existing on-site sewage disposal systems in wellhead protection areas.

6.3.6 Work with the CCHD to support efforts to establish mandatory subsurface sewage disposal septic inspection/maintenance programs for existing septic systems, particularly areas needing environmental health guarantees.

6.3.7 Expand treatment facilities to meet current and future demand for development within urban areas.

6.3.8 Extension of public sewer service shall not be permitted outside urban growth areas, except in cases where there is a documented threat to public health or the environment, or to provide sewer service to public regional park facilities that are outside of but adjacent to an urban growth boundary.

6.3.9 Extension of public sewer service beyond city limits shall be prohibited without annexation or commitments to annexation in the near future.

6.3.10 Sewer service plans shall be coordinated with the 20-Year Plan policies and maps, including urban growth area designations.

6.3.11 Discourage new development from relying on forced mains or STEP systems for effluent treatment within the UGA.

6.3.12 Require the use of public or community septic systems in areas where soil characteristics limit the use of on-site sewage systems.

6.3.13 Provide public education about the potential for groundwater contamination from on-site sewage disposal systems.

GOAL: Provide a long-range stormwater management program to minimize impacts from stormwater discharge from existing and new development.

6.4 Policies

6.4.1 Maintain clear development review standards for the control of the quantity and quality of storm water discharge from development projects which emphasize on-site retention, treatment and infiltration of run-off to minimize impacts on the established wastewater system and local streams, rivers and lakes.

6.4.2 Limit the removal of vegetation during development in order to reduce storm water run off and erosion.

6.4.3 Develop and implement comprehensive storm water management plans, including funding provisions, for all watersheds in the county.

6.4.4 Develop measures countywide to ensure erosion and sediment control for new development, re-development, and excavation projects.

6.4.5 Explore the possible formation of a storm water utility.

6.4.6 Establish a coordinated approach with local jurisdictions to solve both surface water and groundwater.

6.4.7 Clark County shall monitor and update the stormwater control ordinance and related policies and standards to implement and enhance stormwater management.

GOAL: Coordinate with individual school districts to ensure that school sites and facilities are constructed to meet the educational needs of county residents.

6.5 Policies

6.5.1 Schools and related facilities are strongly encouraged to locate within the urban growth areas. Schools may be constructed in the urban reserve area where necessary to serve population growth within and outside of the urban growth boundary if the following conditions are met:

- School sites within the urban reserve area shall be located as close to the urban growth boundary as possible, preferably within 1/4 mile.
- The school district shall demonstrate that the proposed site is more suitable than alternative sites within the existing urban growth area. Suitability includes factors such as size, topography, zoning, surrounding land uses, transportation, environmental concerns and location within the area to be served.
- The school district shall demonstrate that transportation facilities serving the site are adequate to support site generated traffic, including buses.
- The school district shall agree to connect to public water and sewer when they become available. Availability is defined to be within 300 feet of the site without requiring special facilities such as pump stations or capital improvements such as larger pipes to increase capacity of the system.

6.5.2 Encourage and work with school districts serving predominantly rural area populations to locate within designated rural centers.

6.5.3 Encourage and work with school districts to allow for shared access of facilities for recreational or other public purposes.

6.5.4 Encourage and work with school districts to maintain and increase efficient delivery of services through non-traditional means such as year round schools, regionally shared facilities and services and maximum use of technology advances.

6.5.5 Provide for the use of School Impact Fees as a funding source for school capital facilities.

6.5.6 Capital Facilities Plans for the school districts of Vancouver, Evergreen, Battle Ground, Camas, Washougal, Ridgefield, Hockinson, La Center and Green Mountain shall be adopted by reference through the adoption of the 20-Year Comprehensive Plan.

GOAL: Provide police, fire and emergency medical services efficiently and cost effectively to residents of Clark County.

6.6 Policies

6.6.1 Encourage interjurisdictional cooperation among law enforcement and corrections agencies to continue to further develop, where practicable, shared service and facility use.

6.6.2 Encourage continued and further interjurisdictional cooperation among fire districts where practicable, in areas of mutual aid, sharing of equipment and facilities, and consolidation of districts.

6.6.3 Encourage development of community benchmarks and program performance measures to monitor outcomes from public safety efforts.

6.6.4 Mobile services such as police, fire, and other services may establish precincts and similar facilities beyond the urban growth area. The level of service provided in such cases should remain rural in nature.

6.6.5 Provide for regular fire and building inspections.

6.6.6 Continue to provide for animal control services.

6.6.7 Encourage resource allocation decisions based on achievement of outcomes rather than simply workload or output measures.

6.6.8 Provide for comprehensive origin and cause and complete incendiary and arson fire investigation across jurisdictional and regional boundaries.

6.6.9 Develop and implement a comprehensive information management system for all fire, law enforcement, emergency responders, general government, and the general population with interagency use and compatibility.

6.6.10 Provide for regional training of fire, law enforcement, and other emergency service providers. Provide educational and training opportunities for identified segments of the population who use emergency services.

6.6.11 Identify funding mechanisms with inter jurisdictional participation and cooperation to support regionally delivered programs.

6.6.12 Identify and implement comprehensive emergency management plans for all service providers consistent with the elements of the Comprehensive Plan.

GOAL: Provide solid waste services efficiently and cost-effectively to residents of Clark County.

6.7 Policies

6.7.1 Continue implementation of the county's Solid Waste Management Plan in order to achieve a 50 percent reduction in the solid waste stream in the next 20 years.

6.7.2 Implement mandatory solid waste collection in all or parts of the county, and continue development and implementation of curbside collection of recyclable materials in rural county areas.

6.7.3 Continue on-going consideration of the needed balance in solid waste disposal between land filling, incineration and recycling, and consider further reduction measures, such as deposits and product container and packaging bans.

GOAL: Facilitate the provision of electricity, natural gas and other services to the residents of Clark County.

6.8 Policies

6.8.1 Encourage location of transmission lines within rights-of-way.

6.8.2 Maintain policies for the siting of substation facilities.

6.8.3 Encourage and coordinate with other agencies in the provision of libraries and social services.

6.8.4 Provide for adequate facilities for county government to deliver services to the public.

6.8.5 Encourage and coordinate with other utility providers in the provision of electric, gas, telecommunications and cable.

GOAL: Develop specific concurrency management standards for incorporation into the development review process, to determine the precise requirements for the timing, funding and circumstances for the provision of concurrent services and facilities.

6.9 Policies

6.9.1 Develop direct concurrency requirements for the provision of transportation, water, sewer, and storm water facilities and services.

6.9.2 Develop direct or indirect concurrency requirements for school services consistent with existing requirements of RCW 58.17.110.

6.9.3 Develop provisions ensuring parks and recreation facilities are provided for all developments as specified in Chapter 8, Parks and Recreation, of the 20-Year Plan.

6.9.4 Capital Facilities plans for the Clark County Parks, Recreation and Open Space Element shall be adopted by reference through the adoption of the Supporting Documentation associated with the 20-Year Comprehensive Plan.

6.9.5 Develop standards or guidelines to determine how the sufficiency of governmental services, including fire protection, law enforcement, solid waste service, telecommunications, electricity, natural gas, government buildings, libraries and other services shall be addressed during the development review process.

6.9.6 Services should be provided, and direct or indirect level of service standards should be established, consistent with general service provision levels outlined in Table 6.13.

6.9.7 Establish a public process to re-evaluate the Land Use Element of the Comprehensive Plan upon determination that financing resources are inadequate to provide necessary public facilities and services to implement the plan.

GOAL: Ensure that capital facilities and services are provided in as cost efficient manner as possible and are consistent with the land use objectives of the 20-Year Plan and State Growth Management Act.

6.10 Policies

6.10.1 Coordinate land use planning and decisions with capital facilities planning and service provision.

6.10.2 Encourage and work with utilities, special districts and other service providers to ensure their functional plans are consistent with county level of service standards.

6.10.3 Encourage and facilitate inter-jurisdictional cooperation and analysis to assess fiscal and other impacts to service delivery related to annexation.

6.10.4 Encourage and facilitate the exploration of shared use of facilities and services between service providers where feasible. Activities to be encouraged range from shared responsibility agreements between police and fire service providers, to development of joint facilities such as schools and parks.

6.10.5 Encourage compact development patterns which are more easily and efficiently served, rather than less dense development patterns which are more difficult and costly to serve.

6.10.6 Within the urban area, encourage and facilitate new development to occur sooner and at greater intensities in areas where necessary services and facilities are already in place and available to serve such development, and to a lesser extent in areas where such facilities are not yet available but can be extended.

6.10.7 To encourage maximum use of existing public facilities and services, encourage new and infill development in the urban area to occur at the maximum densities envisioned by the 20-Year Plan.

6.10.8 Pursue true cost pricing service policies and encourage other providers to pursue similar policies, which allocate the full and true cost of connection to and use of facility and service systems to new system users, and do not allocate costs created by systems additions to existing system users.

6.10.9 In evaluating land use requests in the rural area, the availability of public water or sewer shall not be considered as providing sole justification, or providing any additional justification in combination with other factors, for applications for development densities beyond those specified by the 20-Year Plan, or for proposed changes to the plan.

6.10.10 Changes to the 20-Year Plan shall not be approved which impose inordinate additional net costs on mobile, centralized services such as police, fire, emergency services, school busing or solid waste services.

6.10.11 In evaluating requests for an extension of urban services or levels of service beyond the urban growth boundary in a manner consistent with the 20-Year Plan, Clark County shall consider the implications of such an extension for future growth and development patterns. In evaluating requests for changes to the urban growth boundary or other proposals for development beyond the density specified by the 20-Year Plan, Clark County shall consider implications of such actions for service provision and efficiency of provision.

6.10.12 Coordinate with and encourage continued participation of other jurisdictions and service entities with the Coordinated Water System Plan, the Solid Waste Management Plan and other service plans, where such plans do not conflict with the 20-Year Plan.

6.10.13 Mobile services such as police, fire and other services should locate facilities within the urban area. Precinct or substation facilities may be located in the rural area where necessary to serve rural population, but are encouraged to locate in rural nodes or areas of concentrated development. The level of service provided must be rural in nature only.

6.10.14 The county may invest in urban services or require that urban standards be provided through development review by non-residential developments in the rural area if:

- it is necessary to remedy threats to public health or safety; or,
- the lead agency can demonstrate that the service extension or the application of urban development standards would yield long-term capital cost savings to the jurisdiction as a whole or the investment would complete an identified system which serves the entire growth area (such as a trail or bicycle network); or,
- there is a need to permit urban service extension to a non-residential development that conforms to the 20-Year Plan, and serves the public health, safety, and welfare.

Table 6.13 General Service Provision Levels

SERVICE	URBAN	URBAN RESERVE	RURAL	RURAL CENTERS
WATER	Public water for domestic and fire flow.	Coordinate water systems to match future plans, discourage potable wells for individual dwelling units or use of satellite systems.	Private wells	Public water
SEWER	Public sewer	Septic systems with mandatory maintenance and hook-up when sewer is available.	Septic systems	Community septic systems
STORM DRAINAGE	Gutters, pipes, and regional runoff treatment and control facilities.	Plan for future gutters, pipes, and regional storm water treatment and control facilities.	Open conveyance system. On-site treatment and control of runoff.	Regional runoff treatment and control. May have curbs and gutters/ditches.
SCHOOLS	Full range of school facilities.	Plan for full range of future schools.	Limited	Schools should locate in rural centers.
POLICE	Police protection and facilities.	Sheriff services	Sheriff services	Sheriff services with potential for neighborhood headquarters.
FIRE	Fire protection rating of 3 or better; urban fire flow of 1,000 gpm or better.	Fire protection rating of 3 or better; urban fire flow of 1,000 gpm or better.	Fire protection rating of 6 or less; rural fire flow of 500 gpm.	Fire protection rating of 6 or better.
ELECTRICITY	Electricity	Electricity	Electricity	Electricity
PARKS	Neighborhood, community, and regional.	Plan for neighborhood, community, and regional.	Regional parks	Rural centers may have neighborhood parks.
LIBRARY SERVICES	Libraries	Bookmobile	Bookmobile	Bookmobile
GOVERNMENT BUILDINGS	Facilities	Plan for future facilities.	No facilities	Limited facilities
TELECOMMUNICATION	Phone and fiber optic services fully available	Phone available, plan for fiber optic services	Phone available	Phone available, plan for fiber optic services
NATURAL GAS	Available throughout	Available throughout	Available throughout	Available throughout
SOLID WASTE	Weekly collection from customers, mandatory recycling	Centralized collection, mandatory recycling	Centralized collection, voluntary recycling	Centralized collection, mandatory recycling

gpm = gallons per minute

Source: Clark County Department of Community Development.

STRATEGIES

- Implement water conservation techniques at existing county facilities and design new facilities to optimize water conservation.
- Require new large commercial and industrial developments and high water users, such as schools, parks and golf courses, to implement water reuse and reclamation techniques.
- Revise zoning and subdivision ordinances to encourage design of new development that is consistent with and capable of accommodating the long-term construction of gravity flow sewer systems.
- Maintain a project listing of priority watersheds for basin planning and priority capital improvement projects.
- Endorse and encourage community policing and associated decentralization of police operations to move services closer to areas where services are demanded.
- Encourage and invest in programs and services which provide for partnerships with the community or other entities which help to solve local problems in a cross-disciplinary manner.
- Encourage use of a diversity of resources such as volunteers and civilians where appropriate to improve cost effectiveness of public safety operations.
- Conduct resource allocations based on achievement of outcomes rather than simply workload or output measures.
- Encourage the use of installed fire protection or increased fire resistive construction materials or design and increased use of sprinklers and alarm systems by providing incentives or non-penalties for their use.
- Encourage the development of community oriented police, fire and emergency services programs designed to meet community identified needs.
- Provide increased enforcement and control of illegal dumping.
- Continue consideration of an East County transfer station for solid wastes.
- Protect transmission corridors for energy resources from conflicting development.
- Develop and, if necessary, revise policies consistent with current scientific research regarding electrical magnetic field impacts from high voltage electrical lines, or other utility transmission or substation facilities with health potential impacts. Such policies should at a minimum provide for notice of potential impacts to prospective residents adjacent or near such facilities.
- Incentive policies may be developed to allow adjustments of impact fees where such adjustments are necessary to provide or encourage the provision of a demonstrable public benefit, provided that public share budgetary implications of such adjustments have been addressed.

CURRENT REVENUE SOURCES FOR CAPITAL PROJECTS

General Fund: This is the basic operating fund for the city or county that comes from general tax and revenue resources of the jurisdictions. General fund moneys are often used to finance capital improvement projects. The county's general fund should decrease dramatically in the future as cities annex incorporated lands within their UGAs.

Additional Voter Approved Financing: Voter approved financing is debt financing through voter approved bonds and levies which are funded with property tax revenues. Bonds require a 60 percent voter approval, levies require a simple majority. Both bond and levy financing are described below.

General Obligation Bonds: The cities or county can raise revenues for major capital projects by selling tax-exempt municipal bonds and incurring debt. Bonds are basically loans from investors who are paid interest in return for their investment. The jurisdiction uses its property tax revenues to make its interest and principal payments on the bonds.

The State of Washington limits the amount of debt that jurisdictions can incur. It does so by limiting the amount of taxable property (measured by the property's assessed value) that can be committed to pay off debt. In the State of Washington, jurisdictions are authorized to incur, with a 60 percent majority of voter approval, 2.5 percent of their assessed valuation in general obligation debt for general purposes, 2.5 percent for utility related capital expenditures, and 2.5 percent for parks and open space acquisition.

Of the 2.5 percent allowed for general purposes, a jurisdiction my commit 0.75 percent without a vote of the people. This is known as limited general obligation. An additional 0.75 percent can be incurred to pay for long-term leases.

Property Taxes: The cities and county can raise money for general or specific purposes by increasing property taxes through property tax levies. The State of Washington has an annual 106 percent lid on property taxes. However, with a simple majority of voter approval, cities and counties can increase the lid and levy an additional tax on property for a specified length of time ranging from one to 10 years for a specified purpose.

Intergovernmental Revenues: The county and cities receive grants and matching funds for major capital projects. These revenues come from the state and federal governments for specific projects. Some examples include the Centennial Clean Water Fund, the Water Pollution Control State Revolving Fund and Community Development Block Grants.

Fees and User Charges: The GMA provides cities and counties the authority to implement a variety of taxes for use in mitigating the impacts of growth on capital facilities. User charges and developer fees are designed to recoup the cost of providing public facilities or services by charging all or a portion of the fee to those who benefit from such services. As a tool for affecting the pace and pattern of development such fees may vary for the quantity and location of services provided. Examples include impact fees, utility taxes and special assessment fees.

Lease Purchase: The city and counties can engage in lease purchase agreements for purchasing major equipment like fire trucks or 9-1-1 communications systems. There are a number of reasons, besides current market conditions, which make lease purchase agreements attractive. A primary advantage is leasing a building with an option to buy eliminates the need for the jurisdiction to issue bonds to build a facility. The lease payments are not considered as debt service and thus do detract debt capacity. Since there is no obligation to buy, the jurisdiction can move as growth occurs. A potential disadvantage is

that the lease purchase payments can cost more than current rents. A lease purchase agreement does not require voter approval.

Timber Excise Tax: The county and other local taxing districts (excluding cities) can enact a local timber excise on private timber at a rate of 4 percent, which is allowed as a credit against the State tax.

POTENTIAL NEW REVENUE SOURCES FOR CAPITAL PROJECTS

In addition to current revenue sources, there are a number of other financing options that could potentially be used for capital projects. A brief discussion of some potential sources is conducted below.

Mandatory Dedications or Fees in Lieu of: The city or county may require, as a condition of plat approval, that subdivision developers dedicate a certain portion of the land in the development or a equivalent fee in lieu of dedication be used for public purposes, such as roads, parks or schools.

Impact Fees: Several cities and counties in the region impose fees on developers to finance parks, schools and roads through the provision of the GMA. These impact fees are assessed on the construction of new homes and other buildings. The fees must reflect the costs of providing capital facilities needed to serve the new development. Some local school districts and jurisdictions in Clark County currently use impact fees to finance their capital facilities.

Special Assessment Districts: Special assessment districts implement financing methods for capital facilities which require partial or complete financing by entities other than the jurisdiction. These financing alternatives include those that require financial participation by the existing property owner or developers. Special assessment bonds are restricted to uses related to the purpose for which the district was created. Most typical types of districts include Local Improvement Districts, Road Improvement Districts and Utility Local Improvement Districts.

Growth Induced Tax Revenues: This revenue raising technique would divert some of the incremental tax revenue generated by new growth into a capital fund so that it could be used to finance infrastructure improvements necessary to support growth. For example, a certain percentage of the increment in property tax revenue generated by new growth could be diverted for a specific number of years into a special capital projects fund. Money in that fund would be restricted to use for growth related capital project.

Regional Tax Base Sharing: Regional tax base sharing is a technique for redistributing local government revenues among jurisdictions in a metropolitan area. It generally involves placing a portion of the growth-related tax revenues collected by each jurisdiction into a pool, and then redistributing the pooled revenue among the jurisdictions according to a specified formula. The redistribution formula attempts to address fiscal imbalances or inequities that result from such factors as the inequity in tax generating capacity and public costs among jurisdictions, the unequal distribution among jurisdictions of public facilities that serve the regional population (i.e., the Salmon Creek Wastewater Treatment Plant) and the concentration of both high and low tax generating users in specific jurisdictions. Tax base sharing is not widely used in the United States.

System Development Charges: May be used for storm water control and treatment facilities. Authorized under RCW 36.94.

Storm water Utility: Requires a basin plan to be adopted by Board of County Commissioners similar to existing Burnt Bridge Creek Utility. Authorized by RCW 36.89 and 36.94.

Voter Approved Real Estate Excise Transfer Taxes: In addition to the one-half-of-one percent of Real Estate Excise Transfer (REET) tax authorized by the State Legislature, cities and counties authorized to plan under GMA may also ask voters to approve additional REET taxes for planning and for open space acquisition.

Conservation Futures: The Conservation Futures levy is provided for in Chapter 84.34 of the Revised Code of Washington. Boards of County Commissioners may impose by resolution a property tax up to six and one-quarter cents per thousand dollars of assessed value for the purpose of acquiring interest in open space, farm, and timber lands. The Board of Clark County Commissioners adopted the Conservation Futures levy in October 1985. Conservation Futures funds may be used for acquisition purposes only. Funds may be used to acquire mineral rights and leaseback agreements are permitted. The statute prohibits the use of eminent domain to acquire property.

Real Estate Excise Tax: Chapter 84.46 of the Revised Code of Washington authorizes the governing bodies of counties and cities to impose excise taxes on the sale of real property within limits set by the statute. The authority of counties may be divided into four parts.

1. The Board of Commissioners may impose a real estate excise tax on the sale of all real property in unincorporated parts of the county at a rate not to exceed 1/4 of 1 percent of the selling price to fund "local capital improvements," including parks, playgrounds, swimming pools, water systems, bridges, sewers, etc. Also, the funds must be used "primarily for financing capital projects specified in a capital facilities plan element of a comprehensive plan . . ." This tax is now in effect in Clark County.
2. The Board of Commissioners may impose a real estate excise tax on the sale of all real property in the unincorporated parts of the county at a rate not to exceed 1/2 of 1 percent, in lieu of a five-tenths of one percent sales tax option authorized under RCW 82.14.040 (2). These funds are not restricted to capital projects. The statute provides for a repeal mechanism. However, this levy is not available to Clark County, because it has implemented a portion of its discretionary sales tax option.
3. In counties that are required to prepare comprehensive plans under the new Growth Management Act, Boards of Commissioners are authorized to impose an additional real estate excise tax on all real property sales in unincorporated parts of the county at a rate not to exceed 1/4 of 1 percent. These funds must be used "solely for financing capital projects specified in a capital facilities plan element of a comprehensive plan." This taxing option is not yet in effect in Clark County.
4. With voter approval, Boards of Commissioners may also impose a real estate excise tax on each sale of real property in the county at a rate not to exceed 1 percent of the selling price for the specific purpose of acquiring and maintaining "local conservation areas."

Real Estate Excise Tax - Local Conservation Areas: With voter approval, Boards of County Commissioners may impose an excise tax on each sale of real property in the county at rate not to exceed one percent of the selling price for the purpose of acquiring and maintaining conservation areas. The authorizing legislation (RCW 82.46) defines conservation areas as "land and water that has environmental, agricultural, aesthetic, cultural, scientific, historic, scenic, or low-intensity recreational value for existing and future generations..." These areas include "open spaces, wetlands, marshes, aquifer recharge

areas, shoreline areas, natural areas, and other lands and waters that are important to preserve flora and fauna."